IMPORTANT INFORMATION ABOUT CITY OF WATERTOWN DRINKING WATER

The City of Watertown exceeded the Maximum Contaminant Level (MCL) of 60.0 ug/L for Haloacetic Acids (HAA5) present in drinking water. During the four calendar quarters ending December 31, 2017, the locational running annual average (LRAA) for haloacetic acids was 65.9 mircograms per liter at sample site 15 and 77.2 micrograms per liter at sample site 398. This level is based on a locational running annual average of quarterly samples. Although this is not an emergency, as our customers, you have a right to know what you should do, where these contaminants came from, and what is being done.

What should I do?

You do <u>not</u> need to boil your water or take other corrective actions. No immediate action is required or necessary.

Where do HAA5's come from?

Haloacetic acids are a group of chemicals that includes mono-, di- and trichloroacetic acids and mono- and dibromoacetic acids. Haloacetic acids are formed in drinking water during treatment by chlorine, which reacts with certain acids that are in naturally-occurring organic material (e.g., decomposing vegetation such as tree leaves, algae or other aquatic plants) in surface water sources. The amount of haloacetic acids in drinking water can change from day to day, depending on the temperature, the amount of organic material in the water, the amount of chlorine added, and a variety of other factors. Drinking water is disinfected by public water suppliers to kill bacteria and viruses that could cause serious illnesses. Chlorine is the most commonly used disinfectant in New York State. For this reason, disinfection of drinking water by chlorination is beneficial to public health.

Some studies of people who drank chlorinated drinking water for 20 to 30 years show that long term exposure to disinfection by-products (possibly including haloacetic acids) is associated with an increased risk for certain types of cancer. However, how long and how frequently people actually drank the water as well as how much haloacetic acids the water contained is not known for certain. Therefore, we do not know for sure if the observed increased risk for cancer is due to haloacetic acids, other disinfection by-products, or some other factor. The individual haloacetic acids dichloroacetic acid and trichloroacetic acid cause cancer in laboratory animals exposed to high levels over their lifetimes. Dichloroacetic acid and trichloroacetic acid are also known to cause other effects in laboratory animals after high levels of exposure, primarily on the liver, kidney and nervous system and on their ability to bear healthy offspring. Chemicals that cause effects in animals after high levels of exposure may pose a risk to humans exposed to similar or lower levels over long periods of time.

What happened and what is being done?

The combination of the quantity of disinfectant needed and the amount of naturally occurring organic material in the incoming water resulted in a level of HAA5's in excess of the MCL. In order to kill disease-causing microorganisms, water treatment regulations require a certain contact time for the chlorine and water before it enters the distribution system. City of Watertown personnel are currently working with an Engineering Consultant to identify solutions to this problem.

If you have any questions, please contact the City of Watertown's Water Operator, Mr. Aaron Harvil at (315) 785-7845 or the New York State Department of Health, Watertown District Office at (315) 785-2277.

IMPORTANT INFORMATION ABOUT CITY OF WATERTOWN DRINKING WATER

The City of Watertown exceeded the Maximum Contaminant Level (MCL) of 80.0 ug/L for Total Trihalomethanes (TTHM's) present in drinking water. During the four calendar quarters ending December 31, 2017 the locational running annual average (LRAA) for total trihalomethanes at sample site 398 was 90.5 micrograms per liter. This level is based on a locational running annual average of quarterly samples. Although this is not an emergency, as our customers, you have a right to know what you should do, where these contaminants came from, and what is being done.

What should I do?

You do not need to boil your water or take other corrective actions. No immediate action is required or necessary.

Where do TTHM's come from?

Trihalomethanes are a group of chemicals that includes chloroform, bromoform, bromodichloromethane, and chlorodibromomethane. Trihalomethanes are formed in drinking water during treatment by chlorine, which reacts with certain acids that are in naturally-occurring organic material (e.g., decomposing vegetation such as tree leaves, algae or other aquatic plants) in surface water sources such as rivers and lakes. The amount of trihalomethanes in drinking water can change from day to day, depending on the temperature, the amount of organic material in the water, the amount of chlorine added, and a variety of other factors. Drinking water is disinfected by public water suppliers to kill bacteria and viruses that could cause serious illnesses. Chlorine is the most commonly used disinfectant in New York State. For this reason, disinfection of drinking water by chlorination is beneficial to public health.

Some studies suggest that people who drink chlorinated water (which contains trihalomethanes) or water containing elevated levels of trihalomethanes for long periods of time may have an increased risk for certain health effects. For example, some studies of people who drank chlorinated drinking water for 20 to 30 years show that long term exposure to disinfection by-products (including trihalomethanes) is associated with an increased risk for certain types of cancer. A few studies of women who drank water containing trihalomethanes during pregnancy show an association between exposure to elevated levels of trihalomethanes and small increased risks for low birth weights, miscarriages and birth defects. However, in each of the studies, how long and how frequently people actually drank the water, as well as how much trihalomethanes the water contained is not known for certain. Therefore, we do not know for sure if the observed increases in risk for cancer and other health effects are due to trihalomethanes or some other factor.

The individual trihalomethanes chloroform, bromodichloromethane and dibromochloromethane cause cancer in laboratory animals exposed to high levels over their lifetimes. Chloroform, bromodichloromethane and dibromochloromethane are also known to cause effects in laboratory animals after high levels of exposure, primarily on the liver, kidney, nervous system and on their ability to bear healthy offspring. Chemicals that cause adverse health effects in laboratory animals after high levels of exposure may pose a risk for adverse health effects in humans exposed to lower levels over long periods of time.

Drinking water is disinfected by public water suppliers to kill bacteria and viruses that could cause serious illnesses. Chlorine is the most commonly used disinfectant in New York State. For this reason, disinfection of drinking water is beneficial to public health.

What happened and what is being done?

The combination of the quantity of disinfectant needed and the amount of naturally occurring organic material in the incoming water resulted in a level of TTHM's in excess of the MCL. In order to kill disease-causing microorganisms, water treatment regulations require a certain contact time for the chlorine and water before it enters the distribution system. City of Watertown personnel are currently working with an Engineering Consultant to identify solutions to this problem.

If you have any questions, please contact the City of Watertown's Water Operator, Mr. Aaron Harvil at (315) 785-7845 or the New York State Department of Health, Watertown District Office at (315) 785-2277.